

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn): A method for the adjustment of a gearbox actuation system of an automated gearbox of a vehicle, comprising the step of performing at least one reference travel with the engine in gear.

Claim 2 (withdrawn): The method according to Claim 1, wherein the gearbox actuation system is so made that a reference point is started in the neutral gap without the particular gearshift forks and gearshift rails being moved at the same time.

Claim 3 (withdrawn): The method according to Claim 2, wherein the gearshift rails form a gap with their particular gearshift jaws in which gap a shift finger is moved to start the reference points.

Claim 4 (withdrawn): The method according to Claim 3, wherein the shift finger is moved laterally in the direction of the neutral gap and, at the same time, the reference points are started periodically upward and downward.

Claim 5 (withdrawn): The method according Claim 4, wherein the direction of selection is adjusted when the shift finger is moved over the entire neutral gap width.

Claim 6 (withdrawn): The method according to Claim 2, wherein an adjustment in the gearshift direction is performed parallel to the gearshift rails by means of a provided recess.

Claim 7 (withdrawn): The method according to Claim 3, wherein the shift finger is again moved back into its starting position prior to the reference travel after referencing.

Claim 8 (withdrawn): The method according to Claim 1, wherein said at least one reference travel is performed regularly or irregularly to start the reference points.

Claim 9 (currently amended): A gearbox actuation system for selecting and shifting gears in an automated gearbox of a vehicle comprising:

a shift finger;

a plurality of gearshift rails, each rail in the plurality of gearshift rails in a respective position;

a neutral gap with a first portion formed by respective jaws for said each rail and with a second portion formed separate from the respective jaws and open to the first portion; and,

a gearshift motor, wherein the motor is arranged to move the shift finger in a reference travel from a reference point in the first portion to the second portion and wherein during the movement of the shift finger from the reference point in the first portion to the second portion, said each rail remains in the respective position.

~~means for adjusting at least one reference travel.~~

Claim 10 (cancelled):

Claim 11 (cancelled):

Claim 12 (currently amended): The gearbox actuation system of Claim 9 ~~11~~ wherein said shift finger is moved laterally toward said neutral gap and, simultaneously, said at least one reference point is started periodically upward and downward.

Claim 13 (original): The gearbox actuation system of Claim 12 wherein a direction of selection is adjusted when said shift finger is moved over an entire width of said neutral gap.

Claim 14 (currently amended): The gearbox actuation system of Claim 9 ~~10~~ wherein an adjustment in a gearshift direction is performed parallel to said gearshift rails by means of the second portion of the neutral gap ~~a recess~~.

Claim 15 (currently amended): The gearbox actuation system of Claim 9 ~~11~~ wherein said shift finger is moved back to a starting position prior to reference travel after referencing.

Claim 16 (currently amended): The gearbox actuation system of Claim 9 wherein said ~~at last one~~ reference travel is performed regularly or irregularly.

Claim 17 (currently amended): The gearbox actuation system according to Claim 9 ~~11~~ wherein said gearshift jaws and said gearshift rails are configured such that said neutral gap can be reached during said reference travel without a current gear being disconnected.

Claim 18 (currently amended): The gearbox actuation system according to Claim 9 ~~11~~ wherein said shift finger is configured to be moved within said gap during said reference travel regardless of gear engagement.

Claim 19 (original): The gearbox actuation system according to Claim 18 wherein said gap is provided for purposes of adjustment in the direction of selection.

Claim 20 (currently amended): The gearbox actuation system according to Claim 14 wherein said second portion of the neutral gap ~~at least one recess~~ is provided for adjustment in the gearshift direction.

Claim 21 (currently amended): The gearbox actuation system according to Claim 9 ~~to~~ wherein said gearshift rails have a catch in order to hold a last gear engaged also in an engaged state.

Claim 22 (currently amended): The gearbox actuation system according to Claim 9 ~~further comprising~~ wherein the gearshift motor comprises at least one brushless electric motor for selection and/or shifting.

Claim 23 (new): A gearbox actuation system for selecting and shifting gears in an automated gearbox of a vehicle comprising:

- a shift finger;
- a plurality of gearshift rails;
- a neutral gap with a first portion formed by respective jaws for said each rail and with a second portion formed separate from the respective jaws and open to the first portion; and,
- a gearshift motor, wherein the motor is arranged to move the shift finger in a reference travel from a reference point in the first portion to the second portion.

Claim 24 (new): A gearbox actuation system for selecting and shifting gears in an automated gearbox of a vehicle comprising:

- a shift finger;
- a plurality of gearshift rails;
- a neutral gap with a first portion formed by respective jaws for said each rail and with a second portion formed separate from the respective jaws and open to the first portion; and,
- a gearshift motor, wherein the motor is arranged to move the shift finger in a reference travel from a reference point in the first portion to the second portion and back to the reference position.